

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 13453-62PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below	
International application No. PCT/CA2005/000472	International filing date (<i>day/month/year</i>) 30 March 2005 (30-03-2005)	(Earliest) Priority date (<i>day/month/year</i>) 30 March 2004 (30-03-2004)
Applicant CANADIAN BLOOD SERVICES ET AL		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

☒ the international application in the language in which it was filed

☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I

2. ☒ **Certain claims were found unsearchable** (see Box No. II)

3. ☐ **Unity of invention is lacking** (see Box No. III)

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant

☐ the text has been established by this Authority to read as follows :

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 12

☐ as suggested by the applicant

☐ as selected by this Authority, because the applicant failed to suggest a figure

☐ as selected by this Authority, because this figure better characterizes the invention

b. ☐ none of the figures is to be published with the abstract

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☒ Claim Nos. : 1-29, 46, 48, 54 and 56

because they relate to subject matter not required to be searched by this Authority, namely :

Claims 1-29, 46, 48, 54 and 56, which encompass a method of treatment of the human/animal body, are not required to be searched by this Authority under Rule 39.1 (iv) PCT. Regardless, a search has been carried out and based on the alleged effects of the products defined.

2. ☐ Claim Nos. :

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :

3. ☐ Claim Nos. :

because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest and, where the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7): A61K 39/395, A61P 37/00, A61K 39/00

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(7): A61K 39/395, A61P 37/00, A61K 39/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)
Canadian Patent Database, DELPHION, USPTO, ESPACENET, PUBMED
Autoimmune disease; immune thrombocytopenic purpura, ITP, thrombocytopenia, treatment, intravenous immunoglobulin, antibody; soluble antigen, anti-CD44, antibody antigen complex, ovalbumin, albumin, transferrin

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant	Relevant to claim No.
X	WO 99/03495 A1 (AVRAHAM, H. and GROOPMAN J.E.) 28 January 1999 Abstract; page 2, line 10 to page 4 line 12; page 11, line 35 to page 12, line 23; and page 21, line 25 to page 22, line 14.	1, 2, 7, 11-15, 17-20, 25, 28-32, 37, 43-47, 51, 52, 55 and 56
Y		4, 22, 27, 39-42, 49 and 54
X	WO 02/40047 A2 (LAZARUS, A. et al.) 23 May 2002 Abstract; page 5, line 11 to page 6, line 16.	1, 7, 11-15, 17-19, 25, 28-31, 43-46, 51, 52, 55 and 56
Y		27 and 54

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents :	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

8 June 2005 (08-06-05)

Date of mailing of the international search report

27 July 2005 (27-07-2005)

Name and mailing address of the ISA/CA
Canadian Intellectual Property Office
Place du Portage I, C114 - 1st Floor, Box PCT
50 Victoria Street
Gatineau, Quebec K1A 0C9
Facsimile No.: 001(819)953-2476

Authorized officer

Qianfa Chen (819) 994-1374

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant	Relevant to claim No.
X	SONG, S. et al. Monoclonal IgG can ameliorate immune thrombocytopenia in a murine model of ITP: an alternative to IVIG. Blood. 1 May 2003. Vol.101, No.9, pages 3708-3713.	1, 7, 11-15, 17-19, 25, 28-31, 43-46, 51, 52, 55 and 56
Y	Abstract; and page 3709, right column, line 19 to page 3711, right column, line 22; and Figures 1-5.	27 and 54
X	CA 2,253,058 A1 (MADIYALAKAN, R. et al.) 02 March 2000	1, 7, 8, 11-14, 16, 30, 34, 43 and 44
Y	Page 13, line 12 to page 16, line 5; Examples 1 and 2; and claims 1-4, 42 and 46-48.	4, 22, 27, 39-42, 49 and 54
X	WO 02/076384 A2 (SCHULTES, B. and NICODEMUS, C.F.) 3 October 2002	1, 7, 8, 11-14, 16, 30, 34, 43 and 44
Y	Page 10, line 24 to page 11, line 8; page 12, line 1 to page 16 line 14; and page 35, lines 13-25.	4, 22, 27, 39-42, 49 and 54
X, P	SIRAGAM, M. et al. Can antibodies with specificity for soluble antigens mimic the therapeutic effects of intravenous IgG in the treatment of autoimmune disease? J Clin Invest. January 2005; Vol.115, No.1, pages 155-160. See entire document.	1-56
A	KUTER, D. and ROSENBERG, R.D. The reciprocal relationship of thrombopoietin (c-Mpl ligand) to changes in the platelet mass during busulfan-induced thrombocytopenia in the rabbit. Blood. 15 May 1995. Vol.85, No.10, pages 2720-2730. Abstract; and page 2722, left and right columns, bridging paragraph.	1-56
A	AIGNER, S. et al. CD24 mediates rolling of breast carcinoma cells on P-selectin. FASEB J. September 1998. Vol.12, No.12, pages 1241-1251. Abstract; and page 1246, left column, last paragraph.	1-56
A	RISTAMÄKI, R. et al. Serum CD44 in malignant lymphoma: an association with treatment response. Blood. 1 July 1994. Vol.84, No.1, pages 238-243. Abstract; and page 238, right column, lines 15-17.	1-56

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CA2005/000472

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
WO9903495 A1	28-01-1999	AU8383598 A	10-02-1999
		EP1003547 A1	31-05-2000
		US5980893 A	09-11-1999
WO0240047 A2	23-05-2002	AU2040402 A	27-05-2002
		CA2467781 A1	23-05-2002
		EP1370288 A2	17-12-2003
		US2004047862 A1	11-03-2004
CA2253058 A1	02-03-2000	AT233102T T	15-03-2003
		AU711270 B2	07-10-1999
		AU732505 B2	26-04-2001
		AU762699 B2	03-07-2003
		AU4159399 A	05-01-2000
		AU5658096 A	05-12-1997
		AU8143998 A	04-01-1999
		BR9612619 A	20-07-1999
		CA2253602 A1	20-11-1997
		CA2292912 A1	23-12-1998
		CA2333221 A1	23-12-1999
		CA2464947 A1	01-05-2003
		DE10297379T T5	14-10-2004
		DE69626423D D1	03-04-2003
		DE69626423T T2	18-03-2004
		DK910407T T3	16-06-2003
		EP0910407 A1	28-04-1999
		EP1009433 A1	21-06-2000
		EP1085902 A2	28-03-2001
		EP1297846 A1	02-04-2003
		ES2193240T T3	01-11-2003
		GB0409191D D0	26-05-2004
		HU9903770 A2	28-03-2000
		IL126803 A	23-11-2003
		IL139832D D0	10-02-2002
		JP3565351B2 B2	15-09-2004
		JP11509558T T	24-08-1999
		JP2002504154T T	05-02-2002
		JP2002518342T T	25-06-2002
		NO985304 A	13-11-1998
		NZ332588 A	24-11-2000
		NZ503032 A	30-11-2001
		NZ505174 A	01-03-2002
		NZ516264 A	26-04-2002
		PT910407T T	31-07-2003
		SI910407T T1	31-10-2003
		US6086873 A	11-07-2000
		US6241985 B1	05-06-2001
		US2001036457 A1	01-11-2001
		US2002048586 A1	25-04-2002
		US2005063976 A1	24-03-2005
		WO9742973 A1	20-11-1997
		WO9857661 A1	23-12-1998
		WO9965517 A2	23-12-1999
		WO03034977 A2	01-05-2003
		ZA9810275 A	12-06-2000
WO02076384 A2	03-10-2002	CA2441393 A1	03-10-2002
		DE10296942T T5	18-11-2004
		GB0324503D D0	26-11-2003
		US2005031619 A1	10-02-2005